

# Best Management Practices

MISSOURI DEPARTMENT OF CONSERVATION



## Pallid sturgeon

*Scaphirhynchus albus*

**Common name** • Pallid sturgeon

**Scientific name** • *Scaphirhynchus albus*

**Federal status** • Endangered

**State status** • Endangered

### Ecology

The pallid sturgeon is a large, ancient fish limited to the Missouri River and lower Mississippi River drainage basins. These fish inhabit bottom areas of open channels that have strong current and firm sandy substrate. They may also be found along sandbars and behind wing dikes. Pallid sturgeons feed on the bottom of the river and typically consume aquatic insects, crustaceans, mollusks, marine worms, fish and the eggs of other fish. They are generally long-lived, possibly living as long as 41 years. Males reach sexual maturity at 5 to 7 years. Females are believed to first spawn at 15 to 20 years. Spawning behavior is thought to occur April through mid-June, when water temperatures reach a range between 55-70 F.

### Reasons for Decline

During the past several decades, populations of the pallid sturgeon have drastically declined. Over-harvesting may have been an initial cause of this. However, they are currently threatened primarily by habitat modifications from dam construction, channelization and navigation maintenance of major rivers. These changes destroy spawning areas, reduce food supply or access to food, and block the sturgeon's ability to move within the river. Dams slow flow rates and produce cooler water temperatures, making rivers less desirable for pallid sturgeon. Sturgeon can live and grow in reservoirs, but they cannot reproduce there. Water pollution from rural and urban development along rivers may also be a problem for pallid sturgeons. A more recent problem that will affect the future status of the pallid sturgeon is hybridization with shovelnose sturgeon, which is occurring likely because of a lack of spawning sites for both of these species.

### Specific Recommendations

Habitat protection and restoration in the Missouri and Mississippi rivers and their main tributaries will be necessary to ensure the survival of the pallid sturgeon because these are the only sites that provide suitable habitat for these large river fishes.

→ Channel island tips should not be altered in any manner since pallid sturgeon appear to show a strong affinity for this habitat.

→ Channel alterations that limit or eliminate shallow, sloping bank habitat should be avoided.

→ Dams and other impoundment structures should be prohibited in major rivers to prevent further altering habitat for the pallid sturgeon and other aquatic species.

### General Recommendations

Refer to Management Recommendations for Construction Projects Affecting Missouri Streams and Rivers.

### Information Contacts

For further information regarding regulations for development in rivers and streams, contact:

Missouri Department of Conservation  
Policy Coordination Section  
P.O. Box 180  
2901 W. Truman Blvd  
Jefferson City, MO 65102-0180  
Telephone: 573/751-4115

Missouri Department of Natural Resources  
Division of Environmental Quality  
P.O. Box 176  
Jefferson City, MO 65102-0176  
Telephone: 573/526-3315

U.S. Army Corps of Engineers  
Regulatory Branch  
700 Federal Building  
Kansas City, MO 64106-2896  
Telephone: 816/983-3990

U.S. Environmental Protection Agency  
Water, Wetlands, and Pesticides Division  
901 North 5th Street  
Kansas City, KS 66101  
Telephone: 913/551-7307

U.S. Fish and Wildlife Service  
Ecological Services Field Office  
608 E. Cherry Street, Room 200  
Columbia, MO 65201  
Telephone: 573/876-1911

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